



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/029,087 | 12/20/2001 | Alan B. Shuey | 010071 | 3407 |

9961 7590 07/07/2004

PAUL A. BECK & ASSOCIATES
SUITE 100
1575 McFARLAND ROAD
PITTSBURGH, PA 15216-1808

EXAMINER

RODRIGUEZ, RUTH C

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. Box 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

MAILED

DEC 07 2004

GROUP 3600

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/029,087
Filing Date: December 20, 2001
Appellant(s): SHUEY, ALAN B.

John C. Thomas III
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on 16 April 2004.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

The Examiner acknowledges that claim 23 should have been included with the rejected claims 20-22.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 20-23 do stand or fall together.

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

| | | |
|-----------|--------------|---------|
| 6,003,210 | Facey et al. | 12-1999 |
| 4,889,320 | Pasbrig | 12-1989 |

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 20-23 are rejected under 35 U.S.C. 103 (a) as being obvious over Facey et al. in view of Pasbrig. This rejection is set forth in a prior Office Action, mailed on 25 November 2003.

(11) Response to Argument

Findings

1. Facey discloses a releasable cable grip connector (23) that locks a cable segment (20) within a housing (Figs. 5-8).
2. Facey's releasable cable grip connector comprises a housing (27), a channel (26A,26B) and wedge means (25A,25B) (Figs 2 and 5-8).
3. Facey's housing has a first bore therethrough (24A) to receive a first cable segment and a second bore (24B) therethrough parallel to the to the first bore to receive a second cable segment (Figs. 2 and 5-8).
4. Facey's first and second bores have a diameter that permit freely passing the first and second cable segments through the bores (Figs. 2 and 5-8).
5. Facey's first and second bores are straight throughout the extent of the housing (Figs. 2 and 5-8).
6. Facey's channel within the housing is disposed to one side of the first bore an acutely inclined to and, at its inner end, breaking into the first bore (Figs. 2 and 5-8).
7. Facey's wedge means is positioned within the housing in the channel and spring-loaded by a coil spring (31A,31B) to bias the wedge means against the cable segment within the first bore to wedge the cable segment against the first bore and thereby grip the cable segment (C. 3, L. 12-24 and Fig. 8).
8. Facey's coil spring that spring loads the wedge is positioned axially within the channel so that the force generated by the coil spring acts at all times in an axial direction (Fig. 8).

9. Facey utilizes a separate tool (35) to free the cable (C. 3, L. 25-33 and Fig. 9).
10. Pasbrig teaches a releasable cable grip connector that locks a cable segment (16) within a housing (1) (Figs. 1a, 2a, 2b and 3-7).
11. Pasbrig's releasable cable grip connector comprising wedge means (5), a release lever (6,9,10) and a housing (1) (Figs. 1a, 2a, 2b and 3-7).
12. Pasbrig's housing has a bore (15) therethrough to receive a first cable segment, a channel (2) and a slot (27) (Figs. 1a, 2a, 2b and 3-7).
13. Pasbrig's bore has a diameter that permits the first cable segment to pass freely through the bore (Figs. 1a, 2a, 2b and 3-7).
14. Pasbrig's channel within the housing is disposed to one side of the bore and acutely inclined to and, at its inner end, breaking into the bore.
15. Pasbrig's wedge means is positioned within the housing in the channel and spring loaded by a coil spring (4) to bias the wedge means against the cable segment within the bore to wedge the cable segment against the bore and thereby grip the cable segment (Figs. 1a, 2a, 2b and 3-7).
16. Pasbrig's coil spring that spring loads the wedge means is positioned axially within the channel so that the force generated by the coil spring acts at all times in an axial direction (Figs. 1a, 2a, 2b and 3-7).
17. Pasbrig's slot in the housing extends parallel to the channel and to the coil spring within the channel and communicates with the channel (Figs. 1a, 2a, 2b and 3-7)

18. Pasbrig's release lever is fixed to the wedge means and extends through the slot to the outside of the housing whereby the release lever may be utilized to move the roller means away from the cable segment and permit movement of the cable segment relative to the first bore (C. 1, L. 54-68, C. 2, L. 1-6 and Figs. 1a, 2a, 2b and 3-7).

19. Pasbrig's release lever prevents canting of the wedge means and allows guidance of the wedge means with precision (C. 2, L. 7-11).

20. Pasbrig's release lever transmits the force employed for unclamping directly to the wedge means (C. 2, L. 11-13).

Discussion

In response to remarks on the rejection of claims 20-23 under 35 U.S.C. 103 (a):

Facey discloses a releasable cable grip connector as set forth above in findings 1-9. However, Facey fails to disclose using a release lever extending through a slot in the body to release the cable grip. In light of the findings 19 and 20, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a release lever and a slot according to the teaching of Pasbrig in the each of the bores of the cable grip of Facey. Doing so, facilitates the release of the cable because prevents canting of the wedge means, allows guidance of the wedge means with precision and the release force will be directly applied to the release lever in order to move the wedge means against the bias of the spring. The release lever simplifies the release of the connector because a separate tool that could become lost is not require

to release the wedge means since the release lever connected to the wedge means is integrally connected to the housing in order to allow adjustment. Additionally, the release lever allows more control for the release of the cable segment because only one hand is required to release the wedge means in contrast with the use of a separate tool that requires its insertion at one end of the bore that will require the use of both hands since one hand will hold the tool and the other is needed to hold the connector.

On page 9, lines 5 to 13, the appellants contend that Facey and Pasbrig fail to suggest the desirability of replacing the release tool in Facey's patent with the release lever and slot shown in Pasbrig's patent and that the Examiner is improperly using hindsight to combine the references. However, the test of obviousness is not whether the features of the secondary reference may be bodily incorporated into the structure of the primary reference, not is it that the claimed invention must be expressly suggested in any one or all the references. Rather, the test is what the combination teaching of the references would suggest to those skilled in the art. In this case, the teaching of Pasbrig clearly state that the release lever prevents canting of the wedge means, allows guidance of the wedge means with precision and transmits the force employed for unclamping directly to the wedge means.

On page 9, lines 14-19 and on page 10, lines 1 and 2, the appellants contend that Facey's patent teaches away from having a release lever because the grip connector has a pair of apertures 34A and 34B that are specifically provided for use of the tool 35. The Examiner acknowledges the fact that Facey provides a pair of apertures 34A and 34B that are meant to release the wedge means. However, the fact

that Facey provides these apertures does not mean that Facey teaches away from the use of the release levers. Facey does states that the use of the tool is considered a preferred embodiment for the release of the wedge means but the disclosure provided by Facey does not discuss any flaws derived from the use of release levers by directly making reference to them. Another argument made by the appellants is that Facey fails to provide the slots required for the release levers. The Examiner has always acknowledged the fact that Facey does not discloses the slots necessary to provide the release lever and that the provision of these slots come from the teachings of Pasbrig that provides several advantages mentioned above. Finally, the appellants contend that the slots 34A and 34B will become useless with the use of the release lever. However even when the release levers are provided, these slots could work as a double safe means to release for the wedge member in case that the release levers fail due to repeated use since the slots can provide an alternative means to release the wedge member.

On page 10, lines 3-19, on page 11 and on page 12, lines 1-4, the appellants also contend that Pasbrig teaching of "axial projections mounted directly on the clamping unit transmit the force employed for unclamping directly to the clamping unit" was improperly used by the Examiner to suggest the replacement of the tool for the release levers. The Examiner acknowledges that the disclosure provided by Pasbrig makes reference to other release levers provided in the prior art where the release levers are not directly contacting the wedge means. However, this does undermine the fact that the release levers provide a dependable means to release the wedge means.

because they directly contact the wedge means by being integrally connected to the grip connector. Another argument provided by the appellants to support their position is that the tool directly engages the wedge means during release and therefore it would not be obvious to substitute the tool with another means that directly engages the wedge member. The Examiner agrees with the appellants that the tool directly engages the wedge means, however, as explained above the process necessary to use the tool requires the use of both hands in order to release the wedge means while the release tool provides a one handed means to release the wedge means. The release levers allows guidance of the wedge means with precision since the one handed release provides more control during the release of the wedge member by permitting the other hand to be free.

Finally on page 12, lines 5-19 through end of page 14, the appellants provide arguments against the additional motivation provided by the Examiner in order to support the combination of Facey and Pasbrig. The appellants argue that providing an integral release lever to the grip connector will sacrifice security for convenience. The appellants support their position by arguing that accidental release can occur. However, the possibility of accidental release is very small since the wedge means is spring biased and does not rely solely in frictional forces to maintain the wedge means in the locked position. Therefore, in order to release the wedge means the user must overcome the biasing force of the spring. Another argument provided by the appellants is that the release levers provide ready access for release by anyone. However, these

grip connectors as disclosed by the Applicant and by Facey are used for suspending loads. Therefore, ready access is not freely provided to anyone.

In order to support their case of lack of obviousness, the appellants cited Winner International Royalty Corp. v. Wang. In this case Wang used Johnson's patent as the base reference for his rejection even though this reference teaches away from one of the teaching references, Moore's patent that was the strongest of all the teaching references, by directly addressing some of the security flaws of the device by Moore. The security flaws cited by Johnson were not based on the fact that the ratcheting mechanism lacks the use of a key for setting the device but that the ratcheting mechanism provides "pry points thereabout in which a crowbar may be inserted in an attempt to overcome such mechanism", as cited by Johnson in his disclosure. With respect to the current application being appealed, this will not be the case because the base reference of Facey is not citing any flaws derived by the use of release levers. Also, the disclosure of Facey does cite that the use of a separate tool is considered a preferred embodiment but does not provide any statements that will consider the use of release levers as teaching away from the invention.

On page 14, lines 5-17, the appellants cited a quote from Winner International Royalty Corp. v. Wang and proceeded to conclude that security provided by the device of Facey should not be traded by the convenience of the release levers of Pasbrig. After careful study, the Examiner will also like to point out that the court also provides the following determination after the one cited by the appellants "The fact that the motivation benefit comes at the expense of another benefit, however, should not nullify

Art Unit: 3677

its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefit, both lost and gained, should be weighted against one another." In the case of Winner International Royalty Corp. v. Wang, the issue of security versus convenience is extremely important in order to determine obviousness since Johnson, as cited above, clearly discloses some flaws of the ratcheting mechanism taught by Moore that is prone to tampering. However for the application being appealed, there are not security issues being raised by Facey that will render Pasbrig's release lever as unsafe. Additionally the combination of the two references provides several benefits. The first one is that the release lever simplifies the release of the connector by being integrally attached to the grip connector thereby avoiding the constant use of a separate tool that could become lost while still providing a double safe mechanism. The double safe mechanism allows the use of the release lever as the primary means to release the wedge member but in case of failure of the release lever due to constant use, the use of a separate tool is also possible since the tool can be safely stored due lack of constantly use. And the use of the release levers allows a more controlled use of the grip connector as taught by Pasbrig.

Finally, another decisive factor in the obviousness determination for Winner International Royalty Corp. v. Wang, not cited by the appellants, is the presentation of secondary evidence by Winner. Winner provided evidence of commercial success that effectively linked his improvements of the invention to the commercial sales of the device having such improvements. Winner also provided customer surveys demonstrating that they bought the Winner's device due to these improvements. When

Art Unit: 3677

presented, this secondary evidence is given a lot of weight since commercial success is considered an important factor in the patentability of an invention, as was the case in Winner International Royalty Corp. v. Wang. In the case of this application, no such secondary evidence has been provided to overcome the obviousness rejection.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

RCR
rcr

June 28, 2004

Conferees
js
hs



ROBERT J. SANDY
PRIMARY EXAMINER

PAUL A. BECK & ASSOCIATES
SUITE 100
1575 McFARLAND ROAD
PITTSBURGH, PA 15216-1808

Art Unit: 3677

presented, this secondary evidence is given a lot of weight since commercial success is considered an important factor in the patentability of an invention, as was the case in Winner International Royalty Corp. v. Wang. In the case of this application, no such secondary evidence has been provided to overcome the obviousness rejection.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

RCR
rcr

June 28, 2004

Conferees

js

hs



ROBERT J. SANDY
PRIMARY EXAMINER

PAUL A. BECK & ASSOCIATES
SUITE 100
1575 McFARLAND ROAD
PITTSBURGH, PA 15216-1808